NCERT Textbook Page No. - 134

1. What was the length of the smallest pencil you have used?

Solution:-

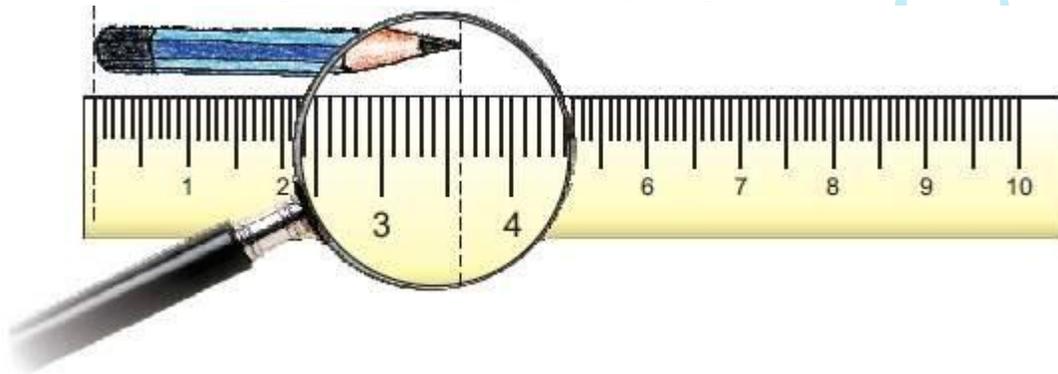The length of the smallest pencil I have used is 2 cm.

2. How long is this pencil? Guess _____ cm

Solution:-

I guess the pencil is 3 cm long.

**3. Measure it using a scale. How good is your guess?**

Solution:-

The length of the pencil measured by using scale is 3 cm and 6 millimetre (mm), so my guess is near to the correct value.

Here one centimetre has 10 equal parts. So each part is one-tenth of a centimetre.

Onetenth of a centimetre is called one millimetre (mm).

4. What is the length of this pencil? _____ mm. What is its length in centimetres?
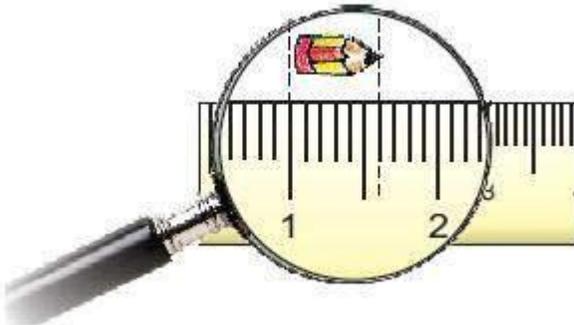
Solution:-

The length of the given pencil is 6mm and its length in centimetres is six-tenth of a centimetre i.e. 0.6 cm.

5. Frogs

Have you seen frogs? Where? How many different types of frogs have you seen? Are all the frogs of the same length?
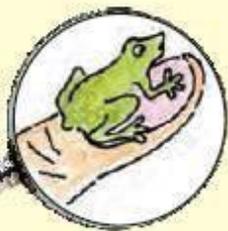
Solution:-

Yes, I have seen frogs. In ponds, lakes etc. I have seen many kinds of frogs. No, not all the frogs are of same length.

Here are two interesting examples.

Gold Frogs

This kind of frog is among the smallest in the world. Its length is only 0.9 cm !

Guess how many such frogs can sit on your little finger!

Bull Frog

But this is among the biggest frogs. It is as long as 30.5 cm!

6. What does 0.9 cm mean? It is the same as _____ millimetres. We can also say this is nine-tenths of a cm. Right?

Solution:-

Here one centimetre has 10 equal parts. So each part is one-tenth of a centimetre. Onetenth of a centimetre is called one millimetre (mm).

So, 0.9 cm is same as 9 millimeters.

Yes, we can say 0.9 cm as nine – tenths of a cm.

EDUGROSS
WISDOMISING KNOWLEDGE

7. So 30.5 cm is the same as _____ cm and _____ millimeter.
Solution:-
So 30.5 cm is the same as <u>30</u> cm and <u>5</u> millimeter.

8. About how many of the big frogs will fit on the 1m scale?
Solution:-
As we know that, 1m = 100 cm.
Then, Length of the big frog is 30.5 cm.
So, 3 big frogs will fit on the 1 cm scale.

9. If they sit in a straight line about how many of the small frogs will cover 1m?
Solution:-
As we know that, 1m = 100 cm.
Then, Length of the small frog is 0.9 cm.
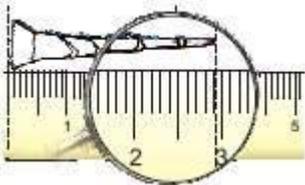   = 100/0.9
        = 111
If small frog sit in a straight line, 111 frogs will cover 1m.
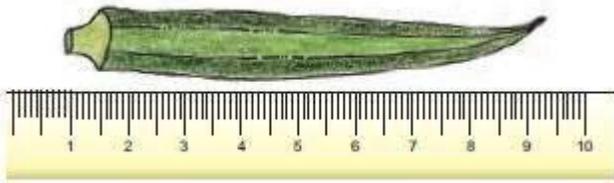
 NCERT Textbook Page No. – 135
Practice time
1. Length of the nail – 2 cm and __ mm or 2 __ cm.

Answer-

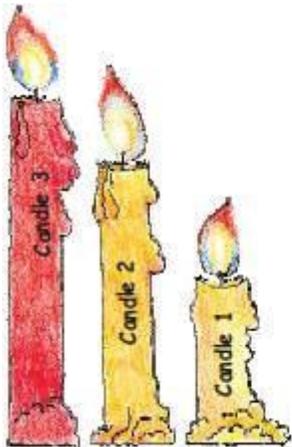Length of the nail – 2 cm and <u>9</u> mm or 2.<u>9</u> cm.

2.

The length of this lady's finger (bhindi) is ____ cm and ____ mm. We can also write it as ____ cm.
Answer-

The length of this lady's finger (bhindi) is <u>8</u> cm and <u>3</u> mm. We can also write it as <u>8.3</u> cm.

3. Using the scale on this page find the difference in length between candle 1 and candle 3.

Length of	Length in cm and mm	Length in cm
Candle 1		
Flame 1		
Candle 2		
Flame 2		
Candle 3		
Flame 3		

Answer-

Length of	Length in cm and mm	Length in cm
Candle 1	2 cm 9 mm	2.9 cm
Flame 1	1 cm 3 mm	1.3 cm
Candle 2	4 cm 9 mm	4.9 cm
Flame 2	1 cm 9 mm	1.9 cm
Candle 3	6 cm	6 cm
Flame 3	1 cm 9 mm	1.9 cm

NCERT Textbook Page No. – 136
Guess and Colour
First colour the rods as shown, without measuring! Then check.

Rods of length less than 1 cm	**Red**
Rods of length between 1 cm and 2 cm	**Blue**
Rods of length between 2 cm and 3 cm	**Green**
Rods of length between 3 cm and 4 cm	**Orange**
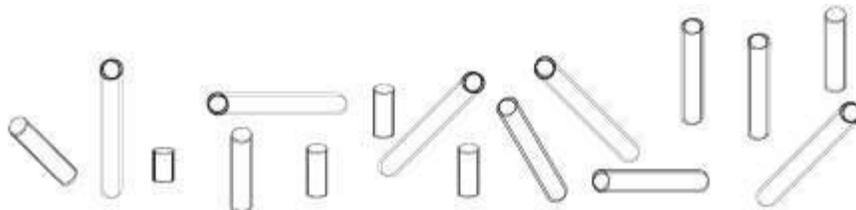
Answer-

Should be done by the students.

NCERT Textbook Page No. – 137
Guess, Draw and Measure
1. Guess the lengths to draw these things. Ask your friend to draw the same. After you make the drawing use a scale to measure the length. Whose drawing showed a better guess?

Guess its length and draw	Measure of your drawing	Measure of your friend's drawing
An ant of length less than 1 cm		
Pencil of length about 7 cm		
A glass 11 cm high with water up to 5 cm		
A bangle of perimeter 20 cm		
A curly hair of length 16 cm		

Answer-

Guess its length and draw	Measure of your drawing	Measure of your friend's drawing
An ant of length less than 1 cm	0.8 cm	1.4 cm
Pencil of length about 7 cm	6.4 cm	7.2 cm
A glass 11 cm high with water up to 5 cm	10.5 cm & 4.6 cm	8 cm and 4.5 cm
A bangle of perimeter 20 cm	18.9 cm	20.2 cm
A curly hair of length 16 cm	15 cm	16.6 cm

NCERT Textbook Page No. – 137 Our

Eyes Get Confused?

1. Which line is longer? A or B? Measure each line and write how long it is in centimetres. How good is your guess?
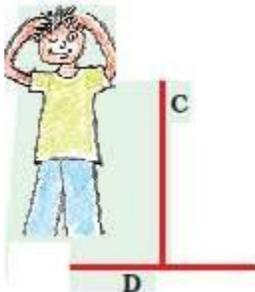

Answer-

Line B is longer than line A.

Line A = 4.6 cm

Line B = 4.6 cm

2. Which line is longer? C or D? Measure each line. How good is your guess?

Answer-

Line C is longer than line D
By measuring both the lines are equal.
C = D = 3.2 cm

NCERT Textbook Page No. – 138 Whose
Tail is the Longest?
1. Guess whose tail is the longest. Now measure the tails. How good is your guess?

Answer-

From the figure we know that the monkey's tail is the longest. The measurement of tails is given below-

Animal	Rat	Lizard	Puppy	Cat	Pig	Monkey
Length of tail	1.4 cm	1.8 cm	0.9 cm	1.3 cm	1.1 cm	2.3 cm

NCERT Textbook Page No. – 138 The
Longest Rupee Notes?
1. What is the length of a 100 rupee note? Guess. Now measure it using a scale.

Answer-

I guess that the length of a 100 rupee note is 16 cm. By measuring it we find that the length of 100 rupee note is 15.6 cm.

2. Now guess the length and width of many other things. Measure and find the difference between your measure and your guess.

Size of	Your guess in cm		Your measure in cm	
	length	width	length	width
100 Rupee note				
10 Rupee note				
20 Rupee note				
5 Rupee note				
Post card				
Math-Magic book				

Answer-

Size of	Your guess in cm		Your measure in cm	
	length	width	length	width
100 Rupee note	15.0	6.0	15.4	7.2
10 Rupee note	12.0	5.0	13.6	6.2
20 Rupee note	14.0	6.4	14.7	6.2
5 Rupee note	11.4	6.4	11.6	6.2
Post card	13.0	8.0	14.4	9.4
Math-Magic book	27.0	21.0	28.4	21.4

Here the difference between measurement and guess

Size of	Difference in cm	
	length	width
100 Rupee note	0.4	1.2
10 Rupee note	1.6	1.2
20 Rupee note	0.7	0.2
5 Rupee note	0.2	0.2
Post card	1.4	1.4
Math-Magic book	1.4	0.4

NCERT Textbook Page No. – 138
At the market

1. How many paise does a matchbox cost?
Answer-
The matchbox costs 50 paise.

2. How many matchboxes can be got for Rs. 2.50?
Answer-
5 matchboxes can be got for Rs. 2.50.

3. How many rupees does the soap cost?
Answer-
The soap costs Rs. 8.75.

4. Arun wanted to buy a soap. He has a five-rupee coin, 2 one-rupee coins and 4 halfrupee coins. Write in rupees what money he will get back.
Answer-
Money with Arun = (5 × 1) + (1 × 2) + (4 × 0.5)
We get
= 5 + 2 + 2
= Rs. 9

We know that
Cost of one soap = Rs. 8.75
So Arun will get back = 9 – 8.75
It can be written as
= (900 – 875) paise
= 25 paise
= Re. 0.25

5. (a) An egg costs two and a half rupees. How much will one and a half dozen cost? (b) How many pens can Kannan buy? How much money is left?

Kannan, take rupees 60 and buy one and half dozen eggs. You can buy pens with the money left.

Answer-

(a) Cost of one egg = Rs. 2.50

So the cost of one and a half dozen eggs = 12 + 6 = 18 eggs

Here the cost of 18 eggs = 18 × 2.50

We can write it as

= 18 × 2 + 18 × 0.50
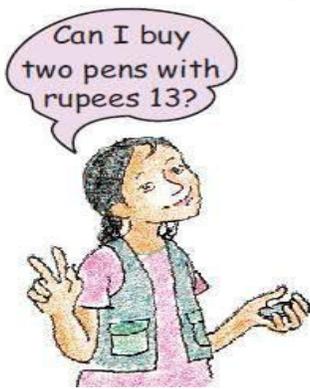
= 36 + 9

= Rs 45

So the money left = 60 – 45 = Rs 15

(b) Kannan can buy 2 pens. The money left with him is Rs. 15

6. The price of two pens is Rs _____. Can she buy two pens?

Answer-

Yes, she can buy two pens of price Rs. 13.

NCERT Textbook Page No. – 140

Practice time – Match these

1. Match each yellow box with one green and one pink box.

Rupee $\frac{1}{2}$	5 paise	Rupee 0.75
Rupee $\frac{1}{10}$	25 paise	Rupee 0.50
Rupee $\frac{5}{100}$	99 paise	Rupee 0.05
Rupee $\frac{3}{4}$	50 paise	Rupee 0.10
Rupee $\frac{99}{100}$	75 paise	Rupee 0.25
Rupee $\frac{1}{4}$	10 paise	Rupee 0.99

Answer-

Rupee $\frac{1}{2}$	5 paise	Rupee 0.75
Rupee $\frac{1}{10}$	25 paise	Rupee 0.50
Rupee $\frac{5}{100}$	99 paise	Rupee 0.05
Rupee $\frac{3}{4}$	50 paise	Rupee 0.10
Rupee $\frac{99}{100}$	75 paise	Rupee 0.25
Rupee $\frac{1}{4}$	10 paise	Rupee 0.99

NCERT Textbook Page No. – 140
Colourful Design
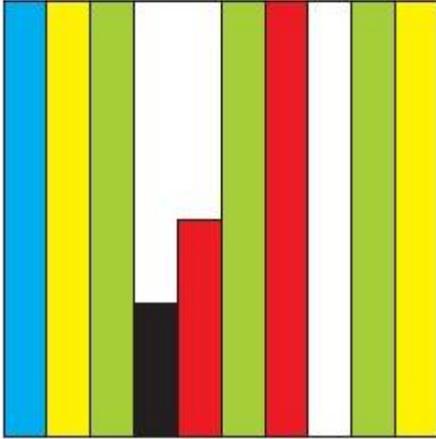
1. What part of this sheet is coloured blue? __ / 10
Answer-

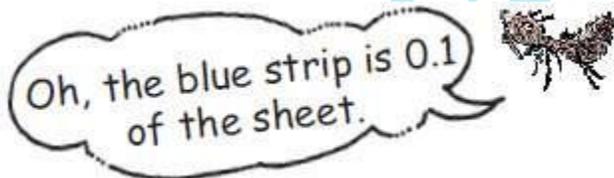1/10 part of this sheet is coloured blue.

2. What part of the sheet is green?
Answer-

3/10 part of the sheet is green.
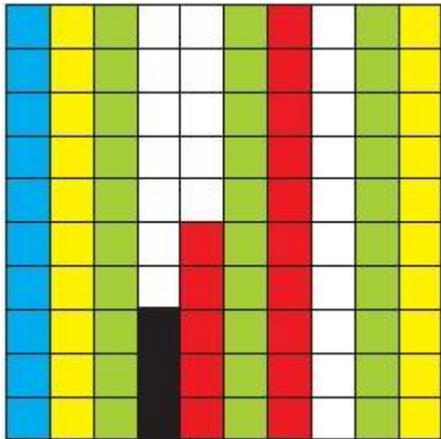
3. Which colour covers 0.2 of the sheet?

Oh, the blue strip is 0.1 of the sheet.

Answer-

Yellow colour covers 0.2 of the sheet.

4. Now look at the second sheet. Each strip is divided into 10 equal boxes. How many boxes are there in all?

Answer-
There are 10 × 10 = 100 boxes are there in all.

5. Is each box 1/100 part of the sheet?
Answer-
Yes, each box is 1/100 part of the sheet.

6. How many blue boxes are there?
Answer-
There are 10 blue boxes.

7. Is blue equal to 10/100 of the sheet? We saw that blue is also equal to 1/10 of the sheet. We wrote it as 0.1 of the sheet.
Answer-
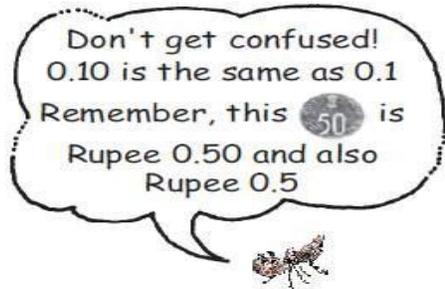Yes, blue is equal to 10/100 of the sheet.
We know that
10/100 = 1/10 = 0.1

NCERT Textbook Page No. – 141
8. Can we say 10/100 = 1/10 = 0.10 = 0.1?
Answer-

Yes, we can say 10/100 = 1/10 = 0.10 = 0.1.

9. Think: Can we write ten paise as 0.1 of a rupee?

Answer-

Yes, we can write ten paise as 0.1 of a rupee.

10.   How many boxes are red? What part of the sheet is this? 15/ ____ Can we also write it as 0.15 of the sheet?
(Hint: remember we wrote 99 paise as 0.99 rupee!)
Answer-

15 boxes are red. It is the 15/100 part of the sheet.
Yes, we can also write it as 0.15 of the sheet.

11. Now 3/100 of the sheet is black. We can say 0.__ sheet is black.
Answer-

Now 3/100 of the sheet is black we can say 0.03 sheet is black.
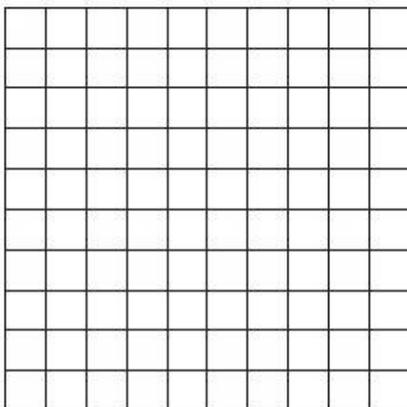
12. How many white boxes are there in the sheet?
Answer-
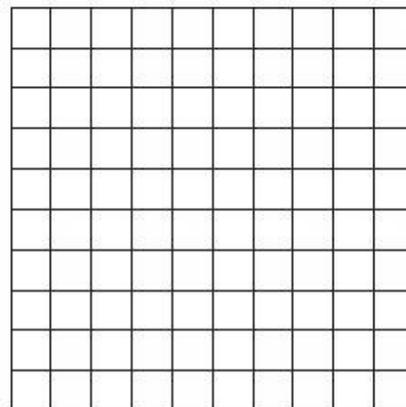
There are 22 white boxes in the sheet.

13. What part of the second sheet is white?
Answer-

22/100 part of the second sheet is white.

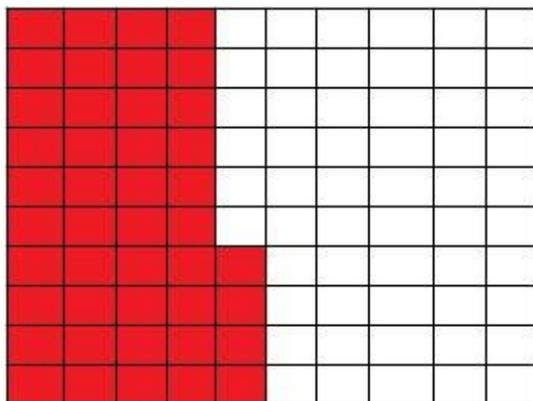**14. Make your designs.**

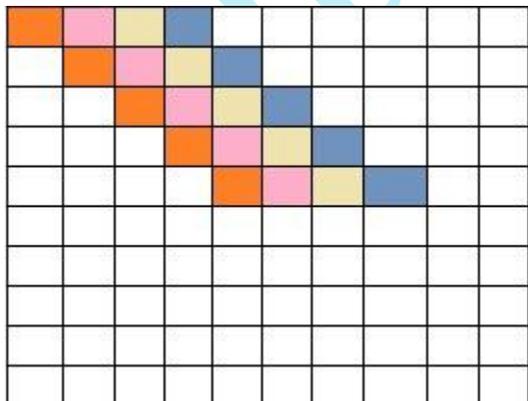Make a nice design by colouring 0.45 part of this square red.

Use four colours. Each colour should cover 0.05 of this square.

Answer-

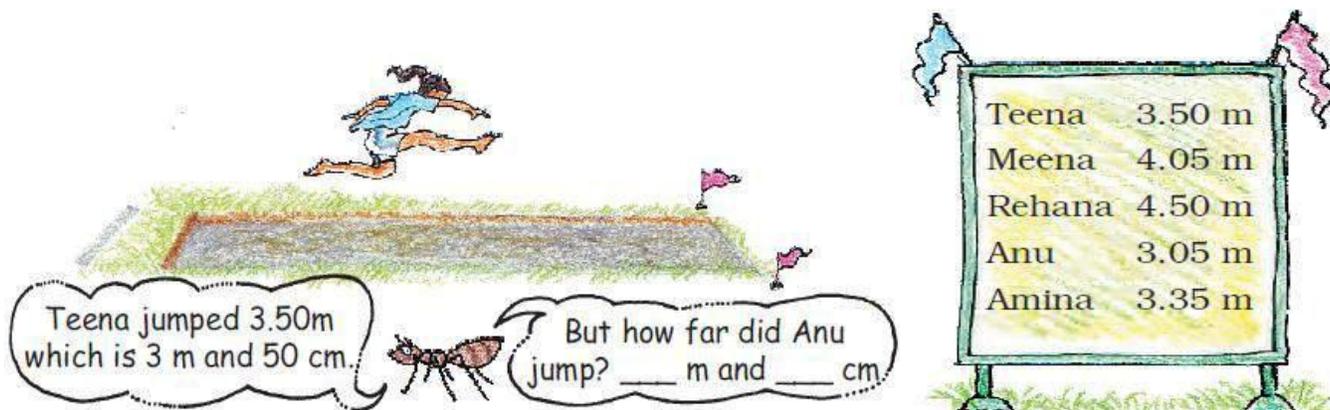By colouring 0.45 part of this square red.

Four colours where each colour covers 0.05 of this square.

NCERT Textbook Page No. – 141
Sports Day
The school at Malappuram has its sports day. The first five children in the Long Jump are:

1. But how far did Anu jump? ___ m and ___ cm.
Answer-
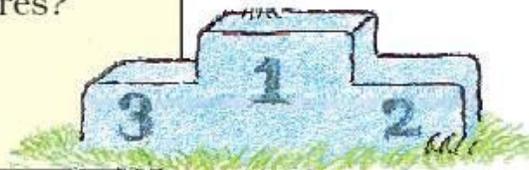Anu jumped 3 m and 5 cm.

2. Who is the winner in the long jump?
Answer-
Rehana is the winner in the long jump.

3. Write the names of the I, II and III winners on this stand.

Answer-

The names of the I, II and III winners are – I
– Rehana
II – Meena
III – Teena

We also write 1 cm as 0.01 m.

NCERT Textbook Page No. – 142
Write in Metres

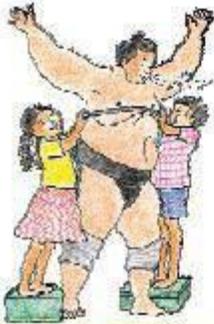|	
3 metre 45 centimetre	⬜ metres
99 centimetre	⬜ metres
1 metre and 5 centimetre	⬜ metres

Answer-

3 metre 45 centimetre = 3.45 m
99 centimetre = 0.99 m
1 metre and 5 centimetre = 1.05 m

NCERT Textbook Page No. – 142
How Big Can You Get

After breathing out 1.52 m

On taking a deep breath 1.82 m

Difference in size ___. Do this for yourself and find the difference.
Answer-

Difference in size = 1.82 – 1.52 = 0.30 m

B) *You have to grow 45 cm more to reach 2 m height*

What is Dinesh's height in metres?

_____ m _____ cm.

Answer-

It is given that

= 2 m – 45 m

We can write it as

= 200 cm – 45 cm

On further calculation

= 155 cm

= 1 m 55 cm

NCERT Textbook Page No. – 143
Practice time
Money from different countries
1. Have you seen any notes or coins used in any other country?
Answer-

Yes, I have seen notes and coins used in Australia.

2. Shivam Bank has a chart to show us how many Indian rupees we can get when we change the money of different countries.

Country	Money	Changed into Indian Rupees
Korea	Won	0.04
Sri Lanka	Rupee (SL)	0.37
Nepal	Rupee	0.63
Hong Kong	Dollar (HK)	5.10
South Africa	Rand	5.18
China	Yuan	5.50
U.A.E.	Dirham	10.80
U.S.A.	Dollar	39.70
Germany	Euro	58.30
England	Pound	77.76

(This is the rate on 15-2-2008)

(A) The money of which country will cost the most in Indian Rupees?
Answer-

The money of England will cost the most in Indian Rupees.

(B) Mithun's uncle in America had sent him 10 USA dollars as a gift. Mithun used 350 rupees for a school trip. How much money was left with him?

Answer-
Money given to Mithun by his uncle = 10 USA Dollar
We know that 1 USA Dollar = 39.70
So the money received by Mithun = 10 × 39.70
It can be written as
= 10 × 39 + 10 × 0.70
= 390 + 7
= Rs 397
Money used by Mithun for a school trip = Rs 350

So the money left with him = 397 – 350 = Rs 47

NCERT Textbook Page No. – 144
(C) Majeed's father is working in U.A.E. He gets 1000 Dirham as salary. Arun's father who is working in Sri Lanka gets 2000 Sri Lankan Rupees. Who gets more Indian rupees as salary?
Answer-

Salary of Majeed's father = 1000 Saudi Riyal
We can write it as
= 1000 × 10.52
By further calculation
= 1000 × 10 + 1000 × 0.52
So we get
= 1000 + 520
= Rs 10520

Salary of Arun's father = 2000 Sri Lankan Rupees
We can write it as
= 2000 × 0.37
By further calculation
= 2000 × 37 paise
= 74000 paise
= Rs 740

Therefore, Majeed's father gets more Indian rupees.

(D) Leena's aunty brought a present for her from China. It cost 30 Yuan. Find what it costs in Indian rupees.

Answer-

Cost of the gift given to Leena = 30 Yuan
We know that 1 Yuan = Rs 5.50
It can be written as
= 30 × 5.50
So we get
= 30 × 5 + 30 × 0.50
= 150 + 15
= Rs 165

(E) Astha wants some Hong Kong Dollars and Won.
1. How many Won can she change for Rs 4? For Rs 400?
2. How many Hong Kong Dollars can she change for Rs 508?
Answer-

1. We know that 1 won = Re 0.04
By multiplying both sides by 100
100 won = 4
Therefore, Astha gets 100 won for Rs 4
So for Rs 400 she gets
100 × 100 = 10000 Won

2. We know that 1 HK Dollar = Rs 5.10
It can be written as
= 5 rupees 10 paise
= 5 × 100 + 10 paise
= 500 + 10
= 510 paise
So the total money with Astha = Rs 508
We can write it as
= 508 × 100
= 50800 paise
Here

50800 paise = 50490 + 310 paise
By further calculation
= 510 × 99 + 310 paise =
510 HKD + 310 paise
We get
310 paise = 300 paise + 10 paise
= 3 rupees 10 paise
= Rs 3. 10

Therefore, Astha can change 99 HK Dollars for Rs 508 and Rs 3.10 left with her.

3. **Kiran went shopping with Rs 200. Look at the bill. The shopkeeper forgot to put the point correctly in the prices. Put the point in the correct place and find out the total amount of the bill.**
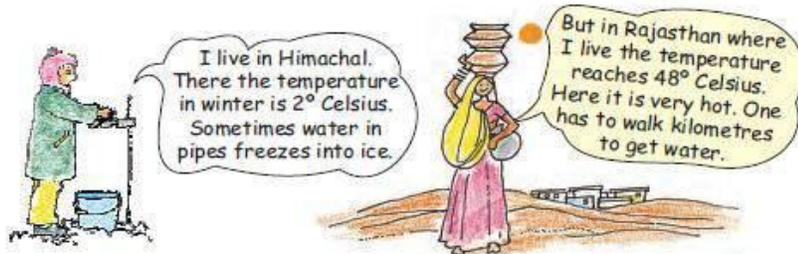
Item	Quantity	Price (Rupees)
Soap	1	1250
Green gram	1 kg	5025
Tea	250 gm	2725
Coconut Oil	1 Litre	6000
	Total	_____

Answer-

Item	Quantity	Price (Rupees)
Soap	1	12.50
Green gram	1 kg	50.25
Tea	250 gm	27.25
Coconut Oil	1 Litre	60.00
	Total	150.00

4. Which city is cool?

The temperature in each city was noted at 3 pm on January 2008.
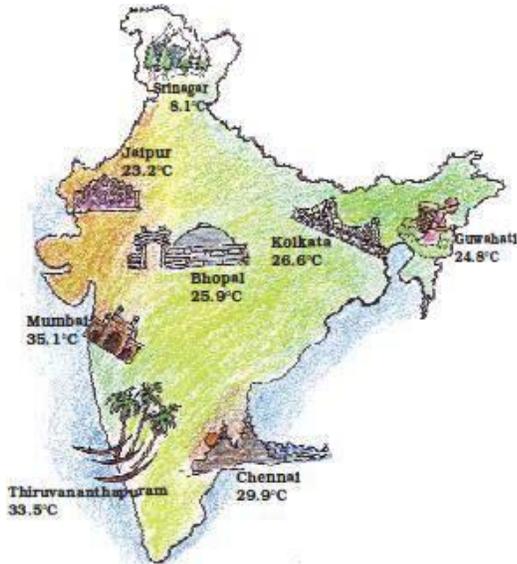
1. Which place had the highest temperature at 3 pm? Which place is the coolest at that time?

Answer-

Mumbai had the highest temperature at 3 pm.

Srinagar is the coolest place at that time.

2. How much higher is the temperature in Mumbai from that in Srinagar?

Answer-

The temperature in Mumbai is (35.1 – 8.1) $^\circ$ C = 27° C higher from that in Srinagar.

3. How many degrees will the temperature need to rise for it to reach 40° C in Thiruvananthapuram?

Answer-

The temperature in Thiruvananthapuram should rise 40° C – 33.5° C = 6.5° C to reach 40°C.

4. How much lower is the temperature of Kolkata from that in Chennai?
Answer-
The temperature in Kolkata is 29.9° C – 26.6° C = 3.3° C lower from that in Chennai.

5. The temperature in these cities was also noted at 3 am on the same day. Look at the table and answer the questions.
(a)   Which place had the lowest temperature at 3 am? Imagine yourself to be there and describe how it would feel.
(b)   What is the difference between the temperatures at 3 pm and 3 am in Chennai? In Bhopal?

City	Temperature at 3 am
Chennai	21.1
Mumbai	19.0
Th'puram	21.6
Kolkata	13.1
Bhopal	9.8
Srinagar	1.3
Guwahati	12.8
Jaipur	10.2

Answer-

(a) Srinagar had the lowest temperature at 3 am.
1.3° C temperature means it would be cold and water will be frozen to ice. People living there should wear woollen clothes and sit near fire to keep themselves warm.

(b) The difference in temperature in Chennai
Temperature at 3 pm = 29.9° C
Temperature at 3 am = 21.1° C
So the difference = 29.9 – 21.1 = 8.8° C

The difference in temperature in Bhopal
Temperature at 3 pm = 25.9° C
Temperature at 3 am = 9.8° C
So the difference = 25.9 – 9.8 = 16.1° C